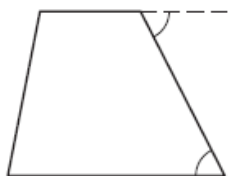


Geometry 6.5 Assignment: Trapezoids and Kites (pp 356-63)

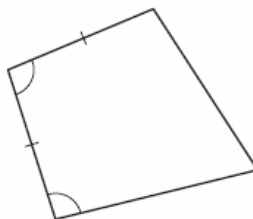
1. What is your name?

Decide whether the figure is a trapezoid. If it is, is it an isosceles trapezoid?

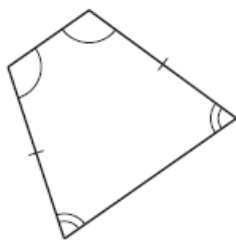
2.



3.



4.

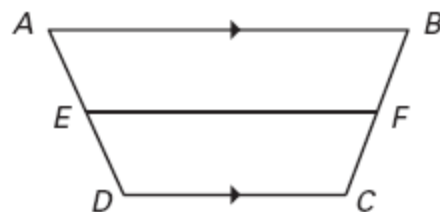


Quadrilateral $ABCD$ is a trapezoid with midsegment \overline{EF} . Use the given information to answer the following.

5. If $m\angle A = 51^\circ$ & $m\angle C = 105^\circ$, then find $m\angle D$.

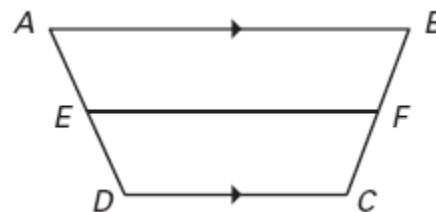
6. If $AB = 28$ and $DC = 13$, then find the measure of EF .

7. If $EF = 13$ and $DC = 6$, then find the measure of AB .



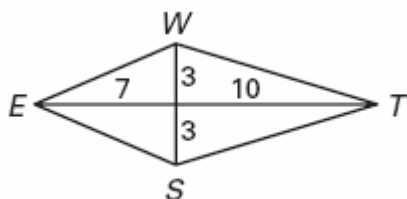
Geometry 6.5 Assignment: Trapezoids and Kites (pp 356-63)

8. Quadrilateral $ABCD$ is a trapezoid with midsegment \overline{EF} . Use the given information to answer the following. If $EF = x + 5$, and $DC + AB = 4x + 6$, then find the measure of EF .

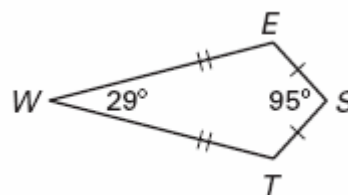


Find the length of the sides to the nearest hundredth, or the measure of the angles in kite $WEST$.

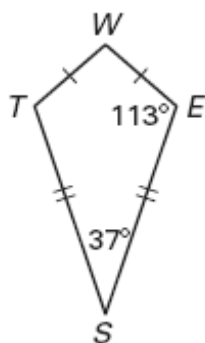
9.



10.



11.

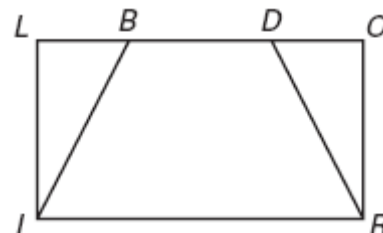


Geometry 6.5 Assignment: Trapezoids and Kites (pp 356-63)

12. In an isosceles trapezoid, if one pair of base angles is twice the measure of the second pair of base angles, what are the measures of the angles?

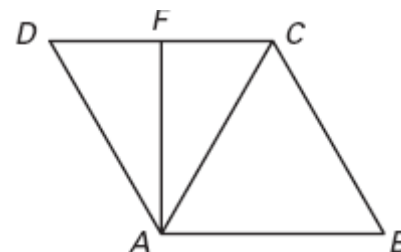
13. If the midsegment of a trapezoid measures 6 units long, what is true about the lengths of the bases of the trapezoid?

14. Given: \overline{LORI} is a rectangle.
 $\overline{LB} \cong \overline{DO}$
Prove: $BIRD$ is an isosceles trapezoid.



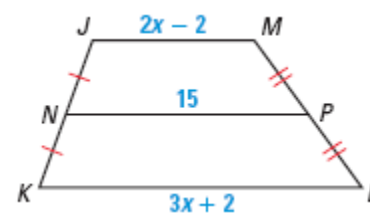
Geometry 6.5 Assignment: Trapezoids and Kites (pp 356-63)

15. Given: $\overline{AF} \neq \overline{BC}$
 $\triangle ABC \cong \triangle CDA$
Prove: $ABCF$ is a trapezoid.



16. ____ In the trapezoid pictured, $NP = 15$. What is the value of x ?

- A. 2
- B. 3
- C. 4
- D. 5
- E. 6



17. ____ Which one of the following can a trapezoid have?
- A. congruent bases
 - B. diagonals that bisect each other
 - C. exactly two congruent sides
 - D. a pair of congruent opposite angles
 - E. exactly three congruent angles

Review.

Rewrite the statement in if-then form. (Chapter 2 Section 1)

18. A scalene triangle has no congruent sides.

19. A kite has perpendicular diagonals.

20. A polygon is a pentagon if it has five sides.

Geometry 6.5 Assignment: Trapezoids and Kites (pp 356-63)

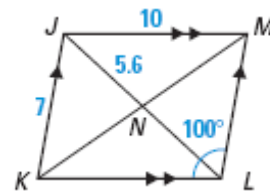
Use the diagram to find the side length or angle measure. (Chapter 6 Section 2)

21. KL

22. $m\angle JML$

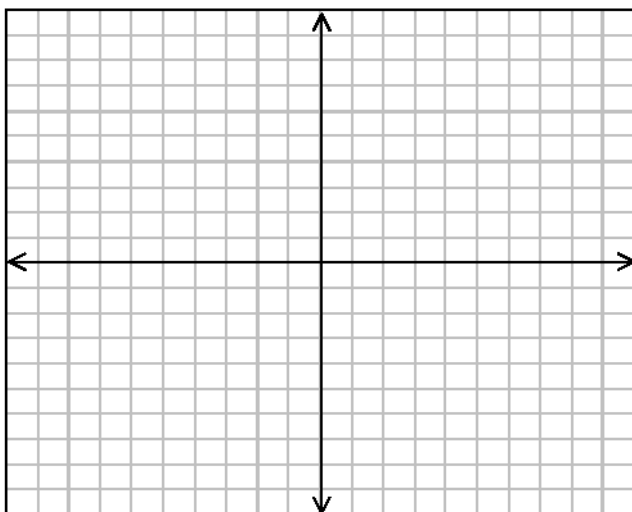
23. ML

24. $m\angle MJK$



Determine whether the given points represent the vertices of a parallelogram. Explain your answer. (Chapter 6 Section 3)

25. $(-2, 8)$, $(5, 8)$, $C(2, 0)$, $D(-5, 0)$



26. $(4, -3)$, $(9, -1)$, $(8, -6)$, & $(3, -8)$

